

JACK J. GRYNBERG

IBLA 87-82

Decided November 30, 1988

Appeal from a decision of the Wyoming State Office, Bureau of Land Management, rejecting simultaneous oil and gas lease offer W-82341.

Affirmed in part, set aside and remanded in part.

1. Oil and Gas Leases: Applications: Simultaneous--Oil and Gas Leases: Known Geologic Structure--Oil and Gas Leases: Noncompetitive Leases

The Secretary of the Interior has no authority under the Mineral Leasing Act to issue a noncompetitive oil and gas lease for lands found to be within a known geologic structure of a producing oil or gas field subsequent to filing of the lease offer and prior to lease issuance. A noncompetitive lease offer for such lands must be rejected notwithstanding the lands were not known to be in a known geologic structure at the time the offer was filed.

2. Oil and Gas Leases: Known Geologic Structure--Oil and Gas Leases: Noncompetitive Leases

A finding that land is within a known geological structure of a producing oil or gas field will ordinarily be upheld on appeal where the evidence of record, including well results, well logs, and structural maps, as analyzed by the Department's technical expert in reports in the file, supports a conclusion that the land is underlain by the trap of a productive formation and, hence, is presumptively productive. An appellant challenging such a finding has the burden of showing by a preponderance of the evidence that the finding is in error.

APPEARANCES: Morris I. Ettinger, for appellant; Lowell L. Madsen, Esq., Office of the Regional Solicitor, U.S. Department of the Interior, Denver, Colorado, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE GRANT

Jack J. Grynberg has appealed from a decision of the Wyoming State Office, Bureau of Land Management (BLM), dated September 16, 1986, rejecting

his noncompetitive oil and gas lease offer W-82341. Appellant's application was drawn with first priority for parcel WY-642 on the July 1982 list of parcels available for simultaneous filings. <sup>1/</sup> The basis for the decision was that the lands sought had been determined to be within the Big Piney-LaBarge known geologic structure (KGS), pursuant to the delineation of that structure made on May 25, 1984, as to the lands in secs. 5 and 8, and on August 15, 1986, as to the lands located in sec. 34.

BLM posted the parcel as available for noncompetitive oil and gas leasing pursuant to the simultaneous oil and gas leasing system, which is governed by the regulations set forth at 43 CFR Subpart 3112. Appellant submitted his lease application and paid the required filing fees. By decision dated December 17, 1982, BLM rejected the lease offer in part as to the lands located in sec. 34 on the ground these lands were included within oil placer claims predating the Mineral Leasing Act and, hence, were unavailable for oil and gas leasing. With respect to the balance of the lands in the parcel, BLM notified appellant in a separate decision of the same date that his application had received priority and forwarded copies of the lease offer form and required stipulations for execution by the appellant.

The partial rejection of appellant's lease application on the basis of the oil placer claims was appealed to the Board, which set aside the BLM decision and remanded the case to ascertain whether the placer claims had been relinquished in light of evidence tendered on appeal. Subsequently, by letter of May 9, 1985, BLM advised appellant that as a result of the relinquishment the lands in sec. 34 were subject to leasing. Accordingly, appellant's lease offer was amended to include the lands in sec. 34.

Thereafter, when the lands were submitted for KGS clearance as required prior to issuance of a noncompetitive lease, the tracts were found to be within the Big Piney-LaBarge KGS as noted above. This finding prompted the decision presently before the Board on appeal.

Appellant makes two fundamental contentions in his statement of reasons for appeal. As a threshold matter, he asserts that there was a sufficient manifestation of consent to leasing on the part of BLM to establish the existence of offer and acceptance and, hence, give rise to a lease contract. Further, appellant contends he should not be made to suffer as a consequence of the delay by BLM in lease issuance.

Appellant's other major contention is that the lands embraced in the lease offer were not properly placed within a KGS. Appellant asserts the presence of deep-seated faults of basement origin transecting the Madison formation omitted from the BLM structure interpretation. Specifically, appellant refers to a north-south trending fault bisecting the township and

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<sup>1/</sup> Grynberg's oil and gas lease offer embraced 794.76 acres described as: Sec. 5, SE $\frac{1}{4}$  NW $\frac{1}{4}$ , N $\frac{1}{2}$  SW $\frac{1}{4}$ ; sec. 8, N $\frac{1}{2}$  NW $\frac{1}{4}$ ; and sec. 34, lots 1, 2, 3, and 4, N $\frac{1}{2}$ , N $\frac{1}{2}$  S $\frac{1}{2}$ , T. 25 N., R. 113 W., sixth principal meridian, Wyoming.

passing through the subject acreage in sec. 34. Appellant contends the subject acreage in the lease offer lies to the west of this thrust fault and that the fault lies between the lands and established Madison production. Appellant also cites the presence of a fault in close proximity to the newly discovered Amoco Keller Rubow (Raptor Unit) well (sec. 12, T. 24 N., R. 112 W.). Further, appellant avers this well is associated with a localized structural anomaly. Seventeen producing wells in the Big Piney-LaBarge KGS constitute an insufficient control to define a structure of this magnitude, according to appellant.

In answer to appellant's statement of reasons, BLM argues that the faults cited by appellant do not transect the Madison formation on which the KGS determination is based and do not affect production of gas from that formation. BLM asserts that the thrust fault found in Tps. 26 and 27 N., R. 113 W., does not extend south into T. 25 N., R. 113 W., citing structure maps from two different sources. Appellant's structural interpretation concerning the existence of a structural anomaly in the vicinity of the Amoco Keller Rubow well is disputed by BLM, which contends the marker used for the top of the Frontier formation in the two wells on which the interpretation was based is not correlative. Further, BLM argues its KGS analysis of August 15, 1986, was based on 35 (rather than 17) wells which have penetrated the Madison formation. Hence, BLM argues appellant has failed to rebut its KGS determination.

[1] As an initial matter we must recognize that the Secretary of the Interior, and his delegated representatives, have no authority under section 17 of the Mineral Leasing Act, as amended, 30 U.S.C. § 226 (1982), to issue a noncompetitive oil and gas lease for land which has been determined to be within a KGS. McDonald v. Clark, 771 F.2d 460 (10th Cir. 1985); McDade v. Morton, 353 F. Supp. 1006 (D.D.C. 1973), aff'd, 494 F.2d 1156 (D.C. Cir. 1974). 2/ Land within a KGS may only be leased by competitive bidding, in accordance with the regulations in 43 CFR Subpart 3120. Thus, the Department is obligated to ensure that no noncompetitive lease will be issued if the land sought is found to be within a KGS at any time prior to issuance of a lease. Kathleen M. Blake, 96 IBLA 61 (1987); Carolyn J. McCutchin, 93 IBLA 134 (1986). Indeed, the Department has explicitly provided by regulation that a noncompetitive oil and gas lease offer filed by an applicant drawn with first priority "shall be rejected in whole or in part as may be appropriate" if, "prior to the time a lease is issued, all or part of the lands in the offer are determined to be within a [KGS]." 43 CFR 3112.5-2(b). It is a well-established principle that delay in the processing of a noncompetitive lease application does not vest in the applicant/offeree any legal or equitable interest or right to a lease where, during the processing of the offer, the land becomes unavailable by reason of

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2/ Section 17 of the Mineral Leasing Act has recently been amended by section 5102(a) of the Federal Onshore Oil and Gas Leasing Reform Act of 1987 (FOOGLRA), P.L. 100-203, 101 Stat. 1330-256, to require that all available lands be initially posted for leasing by competitive bidding. Section 5106(a) of FOOGLRA authorized the processing of pending noncompetitive lease offers on the basis of the law prior to amendment. 101 Stat. 1330-259.

inclusion within a KGS. See Angelina Holly Corp. v. Clark, 587 F. Supp. 1152, 1156-57 (D.D.C. 1984); Kathleen M. Blake, *supra* at 66-67; Hrubetz Oil Co., 93 IBLA 343, 344-45 (1986). <sup>3/</sup> Hence, the decision of BLM must be affirmed if the KGS finding is upheld on appeal.

[2] A KGS is defined by the Department as the "trap in which an accumulation of oil and gas has been discovered by drilling and determined to be productive, the limits of which include all acreage that is presumptively productive." 43 CFR 3100.0-5(l) (emphasis added). While there must be a determination that a structural and/or stratigraphic trap contains oil or gas in commercial quantities, usually by completion of a producing well, the limits of a KGS are not simply the immediate area around the well or land itself determined to be productive, but all land where geologic or other evidence indicates that there is a reasonable probability that the land is underlain by the trap or series of related traps in the same formation. Celeste C. Grynberg, 96 IBLA 87 (1987); B. K. Killion, 90 IBLA 378 (1986); Angelina Holly Corp., 70 IBLA 294 (1983), *aff'd*, Angelina Holly Corp. v. Clark, 587 F. Supp. 1152 (D.D.C. 1984). Such additional land is considered to be "presumptively productive," and is properly included in the KGS. Lloyd Chemical Sales, Inc., 82 IBLA 182 (1984).

The record contains a BLM "Geologic Report," prepared by Dean P. Stillwell, dated August 15, 1986, which discusses the basis for the addition to the Big Piney-LaBarge KGS involved herein. The report indicates that recent additions to the Big Piney-LaBarge KGS, including the lands embraced in appellant's offer, are based on a determination of the productive limits of the Mississippian Madison formation. The Madison trap, BLM states, "lies on the Moxa Arch" which is a "broad, gently folded basement uplift" (Geologic Report, dated Aug. 15, 1986, at 2). The geologic report further explains the basis for the expansion of the KGS:

Amoco Production Company recently completed the Raptor Unit No. 1 well in Section 12, T. 24 N., R. 112 W. This well was completed as a CO<sub>2</sub> rich gas well in the Mississippian Madison Formation and is currently shut in. The well flowed non-combustible gas (96% CO<sub>2</sub>) at a maximum rate of 13.14 million cubic feet of gas per day and 10 barrels of water per day from 30 feet of Madison perforations (16,466-16,496'). This well indicates that the Madison reservoir extends beyond its previously known limits and that a gas/water contact occurs at the minus 9800 foot structure contour. Additional data from 17 other wells not available at the time of the last KGS evaluation of the Madison Formation has been used in making this determination.

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<sup>3/</sup> Although appellant asserts his lease offer was, in fact, accepted by BLM, creating a binding lease contract, we find no evidence in the record to support this assertion. The signature of the authorized officer of BLM on the lease shall constitute acceptance of the lease offer and issuance of the lease. 43 CFR 3112.6-2. The record discloses this did not happen.

Stratigraphic cross-section A-A' (exhibit III) shows well developed porosity in the Madison Formation across the structure. \* \* \* This stratigraphic cross-section of the Madison clearly shows well developed, correlative porosity (in particular, the porosity zone below the datum) in the Madison Formation across the entire structure. The high degree of correlation between equivalent stratigraphic intervals in each well strongly suggests that the reservoir is continuous across the entire structure.

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The Madison Formation contains a very large CO<sub>2</sub> rich reservoir. At the time the original KGS determination was completed, 15 wells had been completed in the Madison Formation. Each well was capable of producing gas from the Madison. Since that time, twenty additional wells have been drilled that further substantiate the presence of this reservoir.

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Additional information received after the initial Madison KGS determination was made indicates that the limit of the presumptively productive reservoir was at a lower elevation on the Moxa Arch structure than originally mapped. Arco Oil and Gas Company completed the Rock Creek Unit No. 1 well in Section 28, T.32N., R.116W. (Exhibit I). This test of the Madison indicated large volumes of CO<sub>2</sub> rich gas. Despite abandonment of this well for economic reasons the test data indicated that the reservoir extended beyond the previously known limits. On the basis of the well, a second KGS determination effective December 20, 1984, extended the presumptively productive limit of the Madison to the minus 8900 foot sub-sea elevation.

The lowest proven gas is now defined as -9798 feet sub-sea based on a test of the Madison Formation in the Amoco No. 1 Raptor unit well (Section 12, T.24N., R.112W.). Amoco has completed this well as a hut-in gas well. Additional testing of this well indicated that the gas/water contact has been reached. A test of perforated intervals deeper in the Madison at 16,608-16,656 feet and 16,900 to 16,919 feet flowed water with low rates of gas production indicating that the lower portion of the Madison is mostly water filled. Well logs for this well confirm this and indicate that the gas/water contact is located at 16,504 feet (-9806 feet sub-sea). For convenience the gas/water contact has been plotted at minus 9800 feet sub-sea on Exhibit I and defines the presumptively productive limits of the Madison reservoir.

BLM Geologic Report at 1-4.

The record discloses that the lands embraced in appellant's lease offer in secs. 5 and 8 are within the boundaries of the KGS as determined by the -9,800 foot gas-water contact contour (BLM Exh. I). It appears that a

portion of the lands described in sec. 34 are also within this boundary. However, this contour drawn through sec. 34 appears to exclude portions of the lands described in that section. With respect to those lands embraced in the offer lying within the -9,800 foot contour, the record presents a substantial basis for finding a KGS. The BLM report and supporting documentation support a finding that the lands are underlain by the productive trap of the Madison formation. The contentions of appellant regarding the existence of a fault isolating the subject acreage from the productive formation and the existence of a structural anomaly in the vicinity of the Amoco well in sec. 12, T. 24 N., R. 112 W., have been rebutted by BLM. An applicant for a noncompetitive oil and gas lease who challenges a determination by BLM that land is within the KGS of a producing oil or gas field has the burden of showing by a preponderance of the evidence that the determination is in error. Bender v. Clark, 744 F.2d 1424 (10th Cir. 1984); Carol Ann Hoffman, 100 IBLA 139 (1987). Upon review of the record in this case, we are unable to conclude that appellant has met this burden as to the lands within the -9,800 foot contour.

With respect to those lands in sec. 34 which may lie outside the -9,800 foot contour, <sup>4/</sup> we are unable to find the KGS determination is supported by the record. The Board has held that a KGS boundary is properly drawn to include the smallest legal subdivision (normally a quarter-quarter section) embraced in whole or in part within the stratigraphic contour defining the limits of the KGS. Kathleen M. Blake, *supra*; see Pamela S. Crocker-Davis, 94 IBLA 328 (1986). Accordingly, we set aside the BLM decision with respect to the lands in sec. 34 and remand the case to allow a determination of the lands therein properly included within the KGS consistent with this principle.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed in part and set aside and remanded in part.

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C. Randall Grant, Jr.  
Administrative Judge

I concur:

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Will A. Irwin  
Administrative Judge

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<sup>4/</sup> The scale of the structure map (BLM Exh. I) is too small to delineate these lands on the present record.

